**AN EXAMINATION OF THE IMPACT OF COMMERCIAL DRIVERS RECKLESSNESS**

**CHAPTER ONE**

**1.1 Background to the Study**

Driving a car, bus, lorry or an articulated-vehicle is a psychomotor activity that requires a combination of concentration and good visual and auditory functions. Several forces that can negatively affect driving mostly fall within the purview of psycho-social factors (Kagashe and Seleman, 2009). Some of these psychosocial factors are the use of alcohol and drug. Others include driver’s personality, the environment, where they grew up, family trauma among others.

Ability to drive successfully from one point to another is an important component of road safety. However, in most part of the world especially in developing countries, few though significant number of drivers do not get to their destinations successfully. This occurs as a result of drivers’ recklessness along the way. Most crashes could have been prevented by small differences in driver behavior but saved for drivers’ recklessness (Redelmeier et al, 2003).

According to O’Brien (2011), the main theoretical perspectives was the frustration-aggression model which identifies both the person related and situational characteristics that contribute to aggressive driving as well as proposing that aggressive behaviors can serve either an instrumental or hostile function. Hostile aggressive drivers were also significantly more likely to engage in speeding, drink/drunk driving behavior.

A driver will adopt an instrumental aggressive behavior when there progress is impeded if it allows them to achieve their immediate goals (E.g reaching their destination as quickly as possible).

Recent studies have considered various psycho-social factors that contribute to reckless driving such as individual characteristics of a driver, driving violation, alcohol, drug use, fatigue, disability, self-esteem, mental health, parenting styles& family background, perception of risk (Javadi, et al 2015).

Studies suggest that those who drive commercial vehicles for a living are more likely to be involved in a vehicular accident than private motorists, even when mileage is taken into account (Chapman, Roberts &Underwood, 2000; Broughton et al, 2003). Indeed, accidents involving those employed who drive for a living account for a large proportion of the total number of work-related deaths in the world.

For example, in Australia, almost half of all motor vehicle accidents involve commercial drivers (Mitchell, Driscoll & Healey, 2004; Boufous & Williamson, 2006).Moreover, in Greece, 25 percent of all accidents involve heavy trucks (Tzamalouka, Papadakaki & Chliaoutakis, 2005). In Sweden, commercial drivers account for the greatest number of those injured or killed on the job relative to their representation in the work force, with driver deaths accounting for about 10 percent of all work-related fatalities in that country (Bylund, Björnstig & Larsson, 1997).

The disproportionate involvement of commercial drivers in moderate to severe motor vehicle accidents (MVAs) suggests the need to better understand what it is about commercial driving that may account for such a high accident rate. Given that commercial driving involves heavier vehicles demanding quicker response times, research into the factors increasing commercial drivers’ vulnerability have focused on psychosocial factors, and in particular, on those drivers’ reckless behaviors that may adversely affect driver awareness, mindfulness and/or response times such as driver exhaustion and alcohol misuse.

Drug abuse and alcohol has become such a problem of great concern to all well meaning Nigerian and particularly the Federal Government to the extent that the Nigerian National Drug Law Enforcement Agency (NDLEA) was established to combat the social disease with a view to reducing the spread of drug abuse to the barest minimum but the impact of the Agency is yet to be felt as drug abuse among commercial drivers in Lagos State continue to be a prime cause of commercial drivers recklessness.

Reckless and distracted driver are quietly causing a staggering amount of serious car accidents. In fact, driver distractions are the leading causes of most auto accidents. Driver distraction is the diversion of attention away from activities critical for safe driving toward a competing activity (Regan, Lee and Young, 2009). Distraction has been identified as an emerging road safety issue in Towards Zero Western Australian’s road safety for 2008-2020 (Road Safety Council, 2009). It is also being increasingly ranked by road safety authorities around the world as significant contributing factors to road traffic accidents (Regan, Lee and Young, 2009).

The Federal Road Safety Commission (FRSC) has said over 80% of road traffic accidents involving commercial drivers on Nigeria roads are usually caused by what it described as

“Psychosocial Factors”. Recklessness, avoidable aggression and road rage which manifest in excessive speeding, overloading, sleepiness, dangerous overtaking, and lack of consideration for other road users were identified by the commission as human factors responsible for the high rate of road traffic crash on the nations roads (FRSC, 2008).

Lagos state sector commander of the FRSC also mentioned that among the psychosocial factors were recklessness, drunkenness, poor quality drivers, indiscriminate parking, over speeding by commercial drivers, bad attitude and culture of driving as well as the attitude of policemen and other uniform men that left their duty of controlling traffic for the money they would get in their pockets, mobile phone use while driving, old age, fatigue, poor eyesight, adding that if precautionary measures were not put in place more deaths could still be recorded on our roads (Daniel, 2010).

**1.2 Statement of the Problem**

Majority of the commercial drivers ignorantly depend on one form of drug or the other for their various daily activities. such drug include tobacco, Indian hemp, cocaine, morphine, Heroine, Alcohol, Epherdrine, Madras, caffeine, Glue, Barbiturates, Amphetamines etc (Daniel, 2010).

The costs of fatalities, injuries and death due to road traffic accidents have a tremendous impact on societal well-being and socio economic development. Road traffic accidents are among the leading causes of death and injury world-wide, causing an estimated 1.2 million deaths and 50 million injuries each year (WHO, 2007)**.** In Ojo Local Government Area of Lagos State, for instance, road traffic accidents are common among commercial drivers due to psycho social factors such as family background, environment, family trauma, get rich quick, phone use, passenger distraction among others.

Preliminary research has shown that most of the commercial drivers operating in Lagos State take alcohol in the morning which would make them drive under influence, and give them extra energy, motivation, and fearlessness to speed limit, and this inevitably put the lives of the passengers at risk of possible elimination, working parents are killed or injured, many women have turned to premature widows, parents lost their wards in road traffic accident as a result of reckless driving and indiscriminate parking at the blind spot leaving children who relied solely on these deceased persons for sustenance.

Despite these challenges, the psycho-social factors predicting commercial drivers’ recklessness in Lagos State have not been studied empirically and thus the character and magnitude of the traffic problem in the area remain unknown. It is against this backdrop that this research seeks to investigate psychosocial factors predicting commercial drivers’ recklessness with a special reference to Ojo LGA of Lagos State.

**1.3 Purpose of the Study**

The general objective of this study is to explore the effect of psycho-social factors on commercial drivers’ recklessness. Other specific objectives of this study are to:

1. To examine the influence of drug use on commercial drivers’ safety in Lagos State.
2. To assess the relationship between drunkenness and commercial drivers’ recklessness.
3. To investigate the link between over-speeding and road traffic accidents.
4. To find out the influence of use of seat-belt on commercial drivers’ safety in Lagos State.

**1.4 Research Questions**

The undertaking of this research project will beam a searchlight on the following research questions;

1. What is the influence of drug use on commercial drivers’ safety in Lagos State?
2. Is there any relationship between drunkenness and commercial drivers’ recklessness?
3. To what extent is over-speeding related to road traffic accidents?
4. Will the use of seat-belt have any influence on commercial drivers’ safety in Lagos State?

**1.5 Research Hypotheses**

The researcher intends to test the following hypotheses:

1. There would be significant relationship between drug use and commercial drivers’ safety in Lagos State.
2. There would be relationship between drunkenness and commercial drivers’ recklessness
3. There would be significant relationship between over-speeding and road traffic accidents.
4. The use of seat-belt has no influence on commercial drivers’ safety in Lagos State.

**1.6 Significance of the Study**

This study was a bold attempt to bring the challenge posed by this hidden psycho-social factors predicting commercial drivers’ recklessness to help reduces cases of road traffic accidents so as to influence social action. It is the researcher’s sincere hope that its findings will add to knowledge on the subject and help fill, to a reasonable extent, the gap in our knowledge on the subject in the Nigerian setting in general and Lagos State in particular.

The findings of this study are expected to create awareness in commercial drivers on the horrors of recklessness, drug use, driving under the influence of alcohol, road rage, excessive speeding, overloading, fatigue, dangerous overtaking, and lack of consideration while driving, all this are ramped under psycho-social factors.

The outcomes of this study will be significant to future researchers and scholars especially those in the field of psychology.

* 1. **Scope of the Study**

The scope of the study encompasses the psychosocial factors predicting commercial drivers’ recklessness. The study area is Ojo LGA of Lagos State, from where sample will be drawn. Ojo became a Local Government in May 1989. The Local Government area houses some industries, the foremost being the Volkswagen of Nigeria [ Von], an automobile assembly plant specializing in manufacturing an assembly of light and medium sized vehicles. Ojo is a tourist haven that attracts a lot of people from the Igba-land, Olojo beach, Ologe lagoon, Badagry creek. The land use of Ojo Local government include, Lagos State University (LASU), Adeniran Ogunsanya College of Education (AOCOED) and the national post graduate medical college.

**1.8 Organization of the Study**

The study is divided into five chapters. Chapter one contains the general introduction, research problem; objectives of the study, scope of study, significance of the study, etc.

Chapter two concentrates on review of relevant literature on psychosocial factors predicting commercial drivers’ recklessness; under the auspices of conceptual clarification, empirical review and appropriate theoretical foundation for the subject matter.

Chapter three focuses on the research methodology; which presents the population, sample and sampling techniques, data collection instruments, validity and reliability of the instruments, techniques of data collection and the method for data analysis.

Chapter four focuses on the data presentation, analysis and interpretation of data and chapter five contains the summary of the study; conclusion drawn and recommendations.

**1.9 Definition of Terms**

Definitions of words/phrase are not based on dictionary meanings but on usage by the researcher:

* **Psychosocial:** This term was used in the study to cover the interaction between social and psychological factors which defined the behaviour that commercial drivers exhibit.
* **Reckless:** This variable defines such behaviour by drivers without caring or showing regard for dangers and its possible consequences.
* **Commercial Drivers:** It covers drivers who are in the service of moving people are their goods from one point to another for an agreed amount of money.
* **Drugs:** The term is used in this report to refer to psychotropic drugs, i.e. chemical substances that affect the brain and the body.
* **Alcohol:** This is liquor that contains ethanol and has the potential to intoxicate drinkers.

**CHAPTER TWO**

**LITERATURE REVIEW AND THEORETICAL FRAMEWORK**

**2.1 Introduction**

This chapter embodies the theoretical framework which includes a critical review of related theories and the empirical framework made up of the conclusions drawn by previous researchers as touching the present research study.

**2.2 Theoretical Review**

Whilst understanding the psychosocial factors predicting commercial drivers’ recklessness (e.g., alcohol, drug, speed, conspicuity issues) assists in the development of initiatives aimed at reducing crashes, the role of theory in this context can play a pivotal role in not only explaining, but predicting, and ultimately changing the behaviour that leads to crashes. Theory can provide a basis for understanding the underlying psychosocial mechanisms inherent in risk-taking behaviour and, most importantly, the means for changing these. Theory enables targeted strategies to be put in place which have predictable (theorized) outcomes. If the theory is sound, interventions can be developed with the knowledge that they are reasonably likely to result in behavioural change and, therefore, play a protective role in preventing such recklessness/crashes from ever occurring. For this reason, this research has been guided by a strong theoretical framework.

Recent studies have considered various psycho-social factors that contribute to reckless driving such as individual characteristics of a driver, driving violation, alcohol, drug use, fatigue, disability, self-esteem, mental health, parenting styles& family background, perception of risk (Javadi et al. 2015).

According to O Brien (2011), the main theoretical perspectives was the frustration-aggression model which identifies both the person related and situational characteristics that contribute to aggressive driving as well as proposing that aggressive behaviors can serve either an instrumental or hostile function. Hostile aggressive drivers were also significantly more likely to engage in speeding, drink/drunk driving behavior.

Road safety research typically uses a multidisciplinary approach, drawing on disciplines

as diverse as psychology, information technology, and engineering. As this particular program of research is to determine the psychosocial factors predicting commercial drivers’ recklessness, theoretical perspectives used in existing studies of commercial drivers behaviour were considered for their applicability to this research. These theories draw mainly on the disciplines of sociology and psychology; in particular, social psychology.

**2.2.1 Risk Theory (RT)**

Human beings take risks on a daily basis. The concept of risk in traffic safety has been widely studied. “Risk surrounds us, it envelops us. It is our personal and societal preoccupation and our salvation. Without understanding it we risk everything, and without capitalizing upon it we gain nothing” (Breakwell, 2007).

It is a concept that defies a single straight forward definition due to its multidisciplinary applicability. For instance, studies involving risk cut across the physical and social sciences by psychologists, sociologists, geographers, economists, nuclear scientists, environmentalists, etc. Because it is applicable in many domains, the term *risk* is sometimes used interchangeably with *hazard* although there might exist a nuance between them. Technically, risk is defined as probability multiplied by consequence (i.e., probability x consequence) (Drotts-Sjøberg, 1991).

Breakwell (2007) defines risk as “the probability of a particular adverse event occurring during a stated period of time”. Breakwell sees the word “probability” as the likelihood of some specific adverse events (e.g., road traffic accidents) that might result from being exposed to a hazard.

**Figure 1**: Risk Thermostat Model



**Source:** Adams & Thompson (2002); Adams (2003).

There is no doubt that human beings are interested in knowing the likelihood or probability of an adverse event happening to them and how bad or worse the effect might be. The search for understanding the nature of risk and how it is perceived by individuals has led to the development of risk theories and models such as the theory of risk homeostasis (Wilde, 1998), risk thermostat framework, the psychometric paradigm, etc. Social scientists have suggested that risk is socially constructed and have set out to investigate how people perceive and negotiate daily risks like road traffic crashes. It must be noted that these theories and models have not gone without criticisms.

According to Dejoy (1989) in the road traffic, risk is the function of four elements. The first is the exposure-the amount of movement or travel, within the system by different users or a given population density. The second is the underlying probability of crash, given a particular exposure. The third is the probability of injury, given a crash. The fourth element is the outcome of injury. Risk can be explained by human error, kinetic energy, or even psychosocial factors.

When people perceive risk several aspects have to be taken into consideration. The first is the probability of a negative event and the severity of consequences of such an event. The result of several researches carried out previously on psychosocial factors predicting commercial drivers’ recklessness and road traffic accidents have shown that greater the consequences of the negative event, the more precautionary action is taken to avoid an expected accident (Rundmo & Iversen, 2004).

According to Thompson et al (2002), risk compensation is the name given to a theory which states that an individual provided with a protective device such as automobile seatbelts will act or behave in a riskier manner because of the increase sense of protection

from the seatbelt and thereby nullify the protection afforded by the seatbelt. According to Wilde (2002), in this thermostat, individual’s risk-taking decisions represent a balancing act in which perceptions of risk are weighed against propensity to take risk. The propensity to take risk is influenced by expected rewards and as a perceived threats or danger increase, people respond by being more careful. There is therefore a balancing behavior influenced by perceived danger and propensity to take the risk which in turn influences accidents and rewards. If the perceived risk of a situation exceeds our target level, we will act to reduce it and if the perceived risk is lower than the target level, we will attempt to increase our risk back to our target level (risk optimization) through more dangerous actions. Wilde’s name for this process is risk compensation. In his view risk homeostasis is therefore an extreme form of behavioral adaptation, not only do we modify our behavior in response to external changes to make us more or less safe but we seek to counteract these changes completely and return to our desired risk level.

The target level of accident risk is determined by four categories of motivating factors Dejoy (1989) and Wilde (2002). One is the expected advantages of comparatively risks behavior alternatives: for instance of a commercial driver trying to gain time by speeding or over speeding when roads are good (risk compensation) (Adams, 1994). Two is the expected costs of comparatively risks behavior alternatives by the commercial drivers: for instance automobile repair expenses and insurance surcharges for being at fault in an accident. Three is the expected benefits of comparatively safe behavior alternatives bu the commercial drivers: for instance the psychology of insurance discount for accident- free driving. And fourth are the expected costs of comparatively safe behavior alternatives: for instance, refusing to use seatbelt by commercial drivers.

**2.2.2 Theory of Planned Behaviour (TPB)**

The theory of planned behaviour (TPB) has been used as the basis of a number of road safety studies in an attempt to understand issues such as speeding and other traffic violations (Newnam, Watson & Murrary, 2004), bicycle helmet use (Lajunen & Räsänen, 2004), pedestrian behaviour (Evans & Norman, 1998), transport modal choice (Forward, 2004), drunk driving (Gordon & Hunt, 1998) and seatbelt use (Gordon & Hunt, 1998).

Ajzen (1991) formulated the TPB to take account of behaviours which are subject to factors over and above an individual’s motivation to perform the behaviour; that is, factors which may be outside the volitional control of the individual. Essentially, like the Theory of Reasoned Action (TRA), the TPB assumes that a person’s salient beliefs underpin his/her behaviour. With the TRA, beliefs influence the attitudes and subjective norms, which in turn are determinants of intention, which then leads to the resulting behaviour. The TPB introduces a third determinant, perceived behavioural control (PBC). PBC is also underpinned by beliefs and is included to take account of factors which are perceived to be not completely under an individual’s control.

Ajzen (1991) argues that the predictive value of the determinants of intention and behaviour will vary across situations and individuals. For example, for some situations, attitudes may be a more important predictor than normative influences. In others, or for other individuals in the same situation, perceived behavioural control may be the best predictor. In short, the theory hypothesizes that these three factors (attitude, subjective norm, and perceived behavioural control) influence the behaviour of most people, although the exact amount of influence exerted by any one of these factors varies according to the particular person and the particular situation. In most people, however, the strength of intention in conjunction with estimates of perceived behavioural control (PBC) will determine the behavioural outcome. Where a person has sufficient actual control over the behaviour in question, intentions alone will predict this behaviour.

**2.2.3 The Theory of Reasoned Action (TRA)**

The theory of reasoned action (TRA) (Ajzen & Fishbein, 1980; Fishbein, 1980; Fishbein & Ajzen, 1975) postulates that intentions are the best predictor of behaviour. Intentions are formulated via a reasoned process whereby the individual considers the consequences of their actions, either implicitly or explicitly. The behaviour reasoned to be the most likely to achieve the most positive outcome for the individual is then enacted.

The TRA hypothesizes two determinants of intentions: attitudes and subjective norms which are underpinned by attitudinal and normative beliefs about the consequences of the behaviour. The strength of a person’s attitude (i.e., their positive or negative evaluation of

performing the behaviour) combined with the weight of social pressure they perceive they are under to perform the behaviour (subjective norm) will influence the strength of their intention to perform the behaviour and the subsequent action.

In a preliminary study into commercial drivers’ behaviour, Rutter et al (1992) used factor analysis on 200 postal surveys to test the TRA (in addition to the 200 surveys used to test the HBM). They found self reported behaviour fell into three main categories: “law breaking”, “carelessness”, and “safety equipment and training”. For these behaviours, personal (or attitudinal) beliefs accounted for a significant proportion of the variance whereas normative beliefs did not. However, when they explored crashes, they found that both attitudinal and normative beliefs about being considerate and law abiding were significantly (negatively) related to crashes. Rutter et al (1995) found that the best predictor of crashes was the self reported behaviour of breaking laws.

The TRA component showed beliefs that being a safe driver meant following the Highway Code, obeying traffic laws, not speeding, and doing as taught *negatively* predicted self reported law breaking behaviour at Time Two. However, a second significant factor, ‘taking care’, was contrary to expectations as the belief that being a safe driver (which meant concentrating properly, maintaining your vehicle, showing consideration, and following the Highway Code) emerged as a positive predictor of law breaking behaviour at Time Two. Rutter et al (1995) suggest that this may be “because a belief in taking care leads to overconfidence, risk compensation, or breaking the law to avert danger to oneself or others”.

**2.2.4 System Theory (ST)**

Explanations of the systems theory are based on man-environment adjustments and maladjustments (Muhlrad et al, 2005). The components of the theory are the environment, the means of transport (commercial vehicles) and reckless behavior of drivers (Krug et al., 2000). The environment component comprises of the natural and the built environments and transport networks. The means of transport component comprises of the volume and quality of vehicles on the modes of transport. The behavior of man component comprises of psychosocial factors which are capable to predict drivers’ recklessness (such as alcohol, drug, education, socio-economic status, stage in life cycle), people’s perceptions of risk and people’s general behavior on the streets. Integrated in the systems theory is a system of highway codes and enforcement mechanisms designed to ensure that road users adhere to the controls and regulations of traffic flow for maintaining road traffic safety. In this context, Haur (1995) asserted that comprehensive traffic management should be sufficient to maintain road traffic safety.

Traffic accidents bear strong elements of man-environment adjustments and maladjustment or recklessness of the driver a well known approach in geography (Muhlrad et al., 2005). Based on the logic of a modified human ecological model of a disease the approach can be transferred to studies of road traffic accident. A model for traffic accident as inspired by the ecological model of a disease was developed by Jørgensen and Abane (1999) who made a heuristic adjustment of this basic model to suit road traffic accident analysis. The model is characterized by three main components:

* The commercial vehicle (corresponding to the vector in disease ecology) which describes commercial vehicles into its composition, age, technical conditions and safety equipments like seat belts in a car.
* The environment, comprising the road system and the wider physical and built up environment. The physical environment splits further into different aspects such as; Daylight and climate (weather conditions and road conditions), Spatial conditions (arrangements and Macro structures), Settlement pattern (Urban or rural / sparse or populated area), situation of areas of residence and working areas, Principle of traffic separation, topography and road constructions qualities.
* The behavior of the commercial drivers; including its characteristics such as age and sex ratio as well as attitudes and general traffic behavior. And it goes further into driving behavior, driving experience, driving style, risk compensation and reckless driving (influence of alcohol and drugs).

Superimposed on this model is a system of traffic laws, regulations and mode of enforcement designed to ensure that the commercial drivers adheres to the controls and regulations so as to maintain some level of road safety i.e. traffic rules (speed restrictions,

road signs), speed controls and convictions for various road traffic offences (Jørgensen and Abane, 1999).

In an attempt to broaden understanding of the role of risks in road traffic accidents, Klinke and Renn (2001) developed six main types of risks named after characters from Greek mythology. These include *Damocles* which are risks with high catastrophic potentials and probabilities widely known; *Cyclops* with no reliable estimate on probabilities but with high catastrophic potential at stake. *Pythia* with causal connection confirmed, damage potential and probabilities unknown. The fourth type is *Pandora* with causal connection unclear or challenged, high persistency risk and ubiquity (bio-accumulation) while the fifth type is *Cassandra* with an intolerable risk of high probability and great damage but long delay between causal stimulus and negative effect. The sixth type called *Medusa* represents perception of high risk among individuals and large potential for social mobilisation without clear scientific evidence for serious harm (Renn, 2002; Hood et al., 2001). Klinke and Renn (2001) concluded that risk management strategies need be tailored to the main characteristics of the risk source in question. That means that in a security and crisis management regime, there should be a number of different means and strategies for dealing with the variety of risk types we face (Hovden, 2004).

The theory is used as a framework for understanding the multiple psychosocial factors predicting commercial drivers’ recklessness that occur in developing cities. Available literature identifies traffic accidents in a place as been caused either by physical factors in the road system (environment), the vehicle or behavioral factors of drivers, and how they interact with enforcement regulations in unique settings.

Thus, the relevance of Systems Theory in understanding the topic under consideration can be seen at three different levels**.** First, the theory helps to identify the system of traffic laws, regulations and mode of enforcement designed to ensure traffic safety in Nigeria. Second the model help to identify the multiple causes interplay of risk factors and prevention of commercial drivers’ recklessness that occur in the study area. Third, the model assist in identifying/understanding the three major contributory factors of road traffic accident including human, mechanical (vehicle) and road environment factors.

**2.2.5 The Haddon Matrix (HM)**

The work of Haddon (1980) is one of the most commonly used paradigm in the injury prevention field. Developed through the application of basic principles of public health

to the problem of traffic safety, the Haddon matrix as it is popularly called is used as a tool to assist in developing ideas to preventing injuries of many types. It provides a compelling framework for understanding the origins of psychosocial factors predicting commercial drivers’ recklessness and also for identifying the multiple countermeasures to address the problem commercial drivers’ recklessness.

The Matrix of four columns and three rows combines public health concepts of Host-Agent-Environment as targets of change with the concepts of Primary - Secondary - Tertiary prevention. More specifically the columns in the matrix define the interacting factors that contribute to the injury process. For instance the host column refers to the person at the risk of injury while the agent of injury is energy e.g (mechanical, thermal or

electrical) that is transmitted to the host through a vehicle (inanimate object) or vector (person or other animals). Physical environment on the other hand covers all the characteristics of the setting in which the injury event takes place such as a roadway or building , while the social environment covers such social and legal norms as alcohol consumption or policies about licensing drivers.

In summary, the Matrix identifies and considers the importance of human, vector or agent, and environmental factors as both causative variables and control measures before, during, and after an injury.

Using the framework, the 4-Es namely: Engineering (Roads and vehicles), Enforcement (laws) Education (Public awareness) and Emergency response (Postcrash Medicare) have been developed as the main thrusts of accident prevention and control across the world. But most recent attempts at managing road safety in developing countries are encapsulated in the Safe system approach which regards road users as the weakest link in the transport chain, unpredictable and capable of errors in spite of his level of education and access to information. The approach transfers a major share of the responsibility from road users to those who design the road transport system since the goals of the safe system is to ensure that crashes do not result in serious human injury.

Key distinguishing features of the safe system approach are the following: (i) Recognizing that prevention efforts notwithstanding, road users will remain fallible and crashes will occur. (ii) Shared responsibility among the designers of the road transport system (to make it safe) and users of the system (obligation to comply with rules and constraints of the system by commercial drivers) (iii) Alignment of safety management decisions with broader transport and planning decisions (iv) Shaping interventions to achieve long-term goal Based on these, the approach has five main cornerstones namely: Safe vehicles, safe roads and mobility; safe road user behaviour, and post- crash response and care. These have formed the focus of safety management strategies in the field of social psychology.

Psychosocial is a combination of factors that are responsible for the psychosocial wellbeing of people. These biological, emotional, spiritual, cultural, social, mental and material aspects of experience cannot necessarily be separated from one another. The term directs attention towards the totality of people’s experience rather than focusing exclusively on the physical or psychological aspects of health and wellbeing, and emphasizes the need to view commercial drivers behavior within the interpersonal contexts of wider family and community networks in which they are located (ARC, 2009).

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**Source:** ARC (2009).

**2.3 Empirical Review**

Atubi (2010) examined the variation patterns of RTA in Lagos state using data for 32 years (1970-2001) and observed the number and type of vehicles involved in road traffic accidents. The study revealed that commercial buses and taxis were more prone to accidents in Lagos State. The 16 Harmonies as for the selected Local Government Areas considered contribute above 90% of the total variance in the time series. This means that more than 90% of road traffic accidents in Lagos State could be attributed to recklessness on the part of drivers, ignorance of high way codes, over speeding etc. Also, the dominant cycles of road traffic accidents observed in this study area have periodicities of 32.00 and 16.00 years with the most dominant being 32 years. This means that the dominant and strongest road traffic accident pattern of Lagos State repeats itself every 32 years.

Hendricks, Fell and Freedman (1999) performed a study on unsafe driving acts in serious traffic crashes to determine the specific driver behaviour and unsafe driving acts that lead to crashes, and the situational, driver and vehicle characteristics associated with these behaviours. They used 11-step process to evaluate the crash, determine the primary cause of each crash, and uncover contributing factors. The crash types were recorded into seven classes with operational differences that were likely to be associated with driver behaviour/performance. It was discovered from the study that crash causation factors can be categorised into vehicle condition, environment condition, driver behaviour, roadway

condition and others. It was also reported that driver recklessness caused or contributed to 99% of the crashes investigated, with the six causal factors that accounted for most of the problem behaviour in decreasing order of frequency, being driver inattention, vehicle speed, alcohol impairment, perceptual errors, decision errors and incapacitation.

Several statistical methodologies have become more acceptable and have been used by a number of researchers in the past who studied risk factors associated with traffic safety. Chang and Yeh (2006) studied risk factors to driver fatalities in single vehicle crashes and compared between motorcycle riders and non-motorcycle drivers using 2000 traffic data from Taiwan’s Road Accident Investigation and Reporting System. Their objective was to investigate the risk factors to driver fatality, provided that a single-vehicle injury crash occurred. Apart from understanding the risk difference amongst these two kinds of drivers, the authors also compared the risk factors contributing to non-motorcycle drivers and motorcycle rider fatalities, and also to possible explanations as to how and why they arise. Four risk factor categories—driver’s characteristics, roadway environment, vehicle type, and single-vehicle crash type—were selected as the explanatory variable categories in that study. The authors employed a logistic regression model to estimate the relative probability of fatalities for drivers and motorcyclists between specific levels of risk factors. The researchers compared the advantages of using the logistic regression method over the least-square regression method. The logistic regression analysis can be used to predict a binary outcome from a set of explanatory variables that may be continuous, categorical, or a mixture of the two unlike the least-squares regression where the dependent variable in the logistic regression analysis can violate the assumptions of continuous or normal distribution, and conditional constant variances.

Study conducted by Al-Ghamdi (2002) applied logistic regression to investigate the influence of commercial drivers factors on fatal and non fatal accidents for motor vehicle in Saudi Arabia. The study found that commercial drivers’ recklessness and location are significantly associated with fatal accidents. Accident factors used in the study including accident location, accident type, collision type, accident time, accident cause, driver age at fault, vehicle type, nationality and license status.

Furthermore, logistic regression has been considered as an appropriate method of analysis in a study conducted by Dissanayake (2004) to compare severity of affecting factors between young and older drivers involved in single-vehicle crashes. The study findings informs that almost all the common identified factors influenced both driver groups in the same manner except in the case of alcohol and drug usage in the case of crash severity of older drivers. Speeding and non-usage of a restraint device were the two most important factors affecting towards increased crash severity for both driver groups at all severity levels. Additionally, ejection and existence of curve/grade were determinants of higher young driver crash severity at all levels. For older drivers, having a frontal impact point was a severity determinant at all levels.

Liu and Dissanayake (2009) examined the Factors affecting crash severity on gravel roads. The authors focused on the characteristics of crashes that were reported on gravel roads with the objective of identifying factors affecting severity of injury crashes on gravel roads. Crash data from Kansas over a 10-year period (1996-2005) was used in the analysis. Logistic regression models were developed to estimate the probability of having an injury crash of different levels of severity for a given set of explanatory variables. The regression modeling considered about thirty candidate factors related to driver, road, environment, and collision types from the police reports. It was found that multiple factors were very significant in these models, such as safety equipment usage, driver ejection, alcohol involvement, speed limit, and some driver-related factors. The existence of these factors was very likely to result in high severity injury crashes, compared to the circumstances without them. The magnitude of such contributing effects was also estimated by computing the conditional odds ratios for individual predictors.

A study conducted by Redelmeier and Tibshirani (2007) shows that helmets and safety belts are effective in reducing fatalities and injuries. Safety belt and helmet use in the seven Crash Outcome Data Evaluation System (CODES) states (i.e., Hawaii, Maine, Missouri, New York, Pennsylvania, Utah, and Wisconsin) could save millions of dollars

in direct medical costs. Logistic regression was used to estimate the effect of being belted on the odds of sustaining various levels of injury. They compared odds ratios to risk ratios and presented safety-belt analyses of injury, cost of injury, alcohol and drug use, age factors, types of safety belts, and geographic patterns in crash characteristics.

Pickrell and Starnes (2008) analyzed motorcycle helmet use for motorcycle riders 21 years and older who were involved in fatal crashes. Their analysis was based on data from the National Highway Traffic Administration’s Fatality Analysis Reporting System (FARS) over the years 1997-2006. Crashes were separated into two categories: (a) single-vehicle motorcycle crashes and (b) two-vehicle crashes involving one passenger vehicle and one motorcycle. A logistic regression model was used to perform a multivariate analysis that examined the relationship between a motorcycle rider’s helmet use and many other factors. The authors found that the odds of a motorcycle rider in a single-vehicle fatal crash wearing a helmet were seventy-two percent less in states lacking a universal helmet law than states with a universal helmet law.

Hassenet at (2011) using the logistic regression model analysis a cross-sectional studies of risky driving behaviors of drivers in Mekelle town, North Ethiopia. The study revealed that drivers with secondary or high school educational status had higher risky driving behaviors than drivers with university or college educational status. However, drivers with lower/primary educational status had no significant statistical difference in risky driving behavior with university or college educational status drivers. This may be related with drivers with lower educational status had more years of driving experiences as they got their driving license with old legislation. The study noted that drivers who had more driving experience were found to exercise more risky behaviors. In contrary, a study in Tanzania showed that drivers who were not having driving experience found to be with high risky driving behaviors. However, study showed that driving experience was not found as a predictor variable for risky driving behavior which needs further investigation for explanation. Conversely a study conducted in Turkey, stated that most drivers perceive traffic accident as a result of fate. This assertion needs further investigation.

Case-control study of risk factors for fatal and non-fatal injury in crashes of rotary-wing aircraft was conducted by O’Hare et.al (2006). The objective of this study was to identify the potentially modifiable risk factors for injury in civil rotary-wing aircraft crashes in New Zealand. The authors performed two separate univariate analyses on all records from 1988 to 1994 that were reported on civil rotary-wing aircraft crashes in New Zealand. The first univariate analysis compared pilots-in command who were fatally injured in a rotary-wing air crash and pilots-in-command who were involved in a crash but not fatally; this analysis was restricted to pilots-in-command to avoid any confusion due to numerous flight crews and seating positions. The second univariate analysis compared pilots-in-command who were injured seriously (fatal or non-fatal) in an air crash to pilots-in-command who were involved in a crash but not hospitalized with an injury. To estimate the unadjusted odds ratios for each of the factors, a set of unconditional univariate logistic regression analyses were conducted. Then multivariate

logistic regression analyses were performed to adjust the effects of off-airport location and post-crash fire for each identified significant factor in the analysis.

Rodgers (1997) evaluated the factors associated with the crash risk of adult bicyclists. A multiple logistic regression analysis was employed to quantify the risk factors, simultaneously controlling a number of bicyclists’ characteristics and bicycle use patterns. The relationship between a set of explanatory variables and a dichotomous dependent variable was examined by using the logit function in the regression model. The logit specification was used to determine the risk factors after adjusting for the potentially complex relationships between rider characteristics and crash risks.

A study by Lardelli-Claret et al (2004) in Spain evaluated driver dependent factors and the risk of causing a collision for motorcycles. A multivariate analysis using an unconditional logistic regression model was used in this study. The condition of infraction was the dependent variable used in the model and the independent variables included the vehicle, driver, and crash related factors. This analysis estimated the odds ratios for each category of all driver related variables, adjusted by the effect of the remaining factors included in the model. A separate stratified analysis was done using speed related infractions as a dependent variable for two groups of cases: drivers who committed only other types of infractions and drivers who committed only speed-related

infractions. The study concludes that inappropriate speed is the variable with the greatest influence on the risk of causing a collision followed by driving under the alcohol influence. Other factors that were associated with higher risk of causing collisions were younger and older drivers, alien drivers, and driving with an invalid license. On the other end being female, longer time in possession of a driving license and helmet use were associated with lower risk.

A study by Dandona et al (2005) reported the risky behavior of drivers of motorized two wheeled vehicles in India. They performed univariate analysis for the determination of outcome variables with other characteristics, and reported chi-square tests for significance. Driving violations were categorized into traffic violations for the analyses (e.g., violation of red light, driving in inappropriate direction, driving while using a mobile phone, entering a no-traffic zone), violating documents (e.g., vehicle registration documents, lack of driver license), vehicle violations (e.g., no horn, no functional head lights, no rear-view mirror) and parking violations.

Kwaga (2006) found in his study on socio-Economic effects of road traffic accidents in Nigeria that Road Traffic Accidents have become a major concern world over to the extent that lives are wasted daily. He confirms that causes of Road Traffic Accidents have been traced to human, environment and vehicular factors. Yakasai (1998) divides cause of RTA into three main groups which are; the vehicle and environmental conditions. He claims that both the second and third factors are usually not responsible for causing road traffic accidents. He posits that it is the driver’s reaction or response to those factors that eventually leads to road traffic crash. The author concludes that most accidents are directly or indirectly caused by improper driving habits, poor mental and physical condition of the driver. Other which he identifies is lack of knowledge and attention to the vehicle behavior, ignorance and disregard to traffic regulations as well as lack of consideration for other road users.

Research into the prevalence and causes of driver exhaustion is extensive with studies finding that fatigue leads to a reduction in alertness, longer reaction times, poor psychometric coordination and less efficient information processing (Lavie et al., 1987; Horne and Reyner, 1995). This is hardly surprising given that cognitive competencies lie at the very core of safe driving (Aworemi et al, 2010). Indeed, several studies identify driver fatigue as a key cause of accidents involving heavy vehicles. For example Hussein (2009) found that 58 percent of the 107 truck accidents examined were attributable to driver fatigue. Similarly, Sabbagh-Ehrlich et al. (2005) interviewed 160 commercial drivers, finding that fatigue is highly prevalent among long-haul commercial drivers, with nearly a third reporting having fallen asleep at the wheel at least once in the past year. Importantly, her research points to the link between psychosocial factors and practices on the one hand, and driver fatigue on the other.

In terms of alcohol misuse among commercial drivers. Data collected among truck drivers by the Substance Abuse and Mental Health Services Administration (USA) indicate prevalence rates of 14.3% for heavy alcohol use, a key element in risky drinking behavior. While other studies (Couper, et al. 2002) conducted in North America report that the prevalence of trace findings of excessive blood alcohol concentrations (BAC>0.04) among on-duty drivers is substantially lower (approximately 2%), for a number of reasons, even these figures are disturbing.

A commercial driver’s self-efficacy belief can enhance his or her driving ability. Self-efficacy refers to the sense of confidence we have to perform a particular task. We all have beliefs about what we can do with the skills that we possess (Jinks et al. 2001). Probably the most widely cited theorist regarding performance self-efficacy is Bandura (1997). His work reveals the ways in which belief about ability influences performance. In general, he reports that expectation about cause and effect results from experience and that the most powerful efficacy beliefs are situation-specific.

Self-regulated learning (SRL) is tied to self-efficacy. SRL emphasizes the emerging autonomy and responsibility of learners to take charge of their own learning (Paris 2001). Three central characteristics of SRL exist. These are awareness of thinking, use of strategies, and sustained motivation. Paris (2001) has noted that part of becoming self-regulated involves awareness of effective thinking and analyses of one’s own thinking habits. With the number of older drivers of commercial vehicles increasing, self-regulation of driving has been proposed as a viable means of balancing the autonomy of adults against the sometimes competing demand of public safety (Okonkwo et al. 2007).

Okonkwo et al (2007) have also reported in their study that participants were most likely to avoid driving in bad weather followed by driving at night, driving on high traffic roads, driving in unfamiliar areas, and making left-hand turns across oncoming traffic. With the exception of driving at night, drivers at higher risk of crashes generally reported greater avoidance of these driving situations than lower risk drivers.

Charlton et al (2006) reported that most of the drivers they studied were very confident and had no difficulty in driving situations including intersections, busy traffic and other higher risk conditions. Charlton et al (2006) further found, overall, less than one quarter of participants they studied reported that they routinely avoided difficult driving situations, most especially night driving.

Young drivers typically engage in reckless behavior because they are less able to perceive risk. They have difficulty identifying hazards that could lead to a crash and often

overestimate their ability to handle the hazards they do identify. Impressionistic drivers also tend to bring along passengers that distract them from driving and encourage them to participate in reckless speeding, racing, or “driving games” (Littlefield, 2005).

**2.4 Summary**

This chapter reviewed the literature on the psychosocial factors predicting commercial drivers’ recklessness under the ambit of Risk Theory (RT), Theory of Planned Behaviour (TPB), The Theory of Reasoned Action (TRA), System Theory (ST) and The Haddon Matrix (HM). Literature review is defined by Kombo and Tromp (2009) as “the works researcher consulted in order to understand and investigate the research problem” based “on what has been published on a topic by accredited scholars and researchers.” Various studies and works done in the Western world, African countries and in Nigeria were reviewed. Literature was reviewed in line with the following objectives of the study: influence of drug use on commercial drivers’ safety in Lagos State, the relationship between drunkenness and commercial drivers’ recklessness, the link between over-speeding and road traffic accidents among others.

Literatures (Ajzen, 1991; Klinke and Renn, 2001; Adams & Thompson, 2002; Dandona et al., 2005; Okonkwo, 2007; Breakwell, 2007; Aworemi et al, 2010; Atubi, 2010) vehemently indicate that commercial drivers’ recklessness is a phenomenon especially in developing countries and drivers’ recklessness in general have long being the interest of sociologists and psychologists researchers because of its predictability of traffic accidents.

**CHAPTER THREE**

**3.0 METHODOLOGY**

**3.1 Introduction**

This chapter describes the design of the study. Quantitative research design is best for gathering, organizing, presenting and analyzing data for the purpose of describing the occurrence of an event or phenomenon. It was used since the study attempt at describing and exploring the psychosocial factors predicting commercial drivers’ recklessness in Lagos State without any attempt being made to control or manipulate the outcomes of the study.

**3.2 Study Area**

The area of the study was Ojo Local Government Area (LGA) of Lagos State. This was due to convenient for the researcher because (i) it was the closest, (ii) commercial drivers from many ethnicities ply this area and (iii) the variables of interest were evident among these workers.

**3.3 Population and Sampling**

The population of study comprised of commercial drivers in Ojo Local Government Area in Lagos State. The study adopted simple random sampling technique. Through this sampling technique, the researcher selected 500 commercial drivers plying various routes in Ojo Local Government Area of Lagos State. The selected sample size is broken down as follows, (i) 270 commercial bus drivers (popularly called danfo drivers), (ii) 150 big bus drivers (coasters and LAGBUS operators), (iii) 80 tricycle operators (fondly called keke).

**3.4 Instruments**

In order to achieve the above stated objectives, primary data will be used. Sets of questionnaires will be administered. The first part of the questionnaire will be used to elicit data on respondent’s demographical characteristics. The second part of the questionnaire will raise questions relating to psychosocial factors predicting commercial drivers’ recklessness in Lagos State. Respondents will be given the following options to the items in the questionnaire:

1. **(N)** = Never
2. **(ST)** = Sometimes
3. **(OF)** = Often
4. **(NA)** = Nearly Always

The primary data will consist of a number of items in structured questionnaire that will be administered to the respondents. The decision to structure the questionnaire is predicated on the need to reduce variability in the meanings possessed by the questions as a way of ensuring comparability of responses. Responses will be scored by indicating appropriate response with a tick (**√**).

**3.4.1 Validity and Reliability of the Instrument**

The content and face validity of the instrument for the study was established by the research supervisor.

There was a pre-testing of the instrument on several respondents before the actual data collection exercise was done in a bid to ensure consistency and comprehensiveness. This helped to ensure that the items were sound and in line with the purpose of the study.

**3.4.2 Pilot Study**

To ensure that the instrument measures consistently what it is purported to measure, a pilot test using test-re-test method was conducted on 15 respondents in the study area. Moreover, the instrument was further subjected to Cronbachs’ Alpha test for reliability with the aid of statistical package for the social sciences (SPSS 20) the result showed 0.92 alpha co-efficient, confirming the instrument to be reliable.

**3.5 Procedure**

Questionnaire were distributed to the participants in their different garages and parks. Being aware of the nature of work of the participants which require high mobility, the filled questionnaire were promptly retrieved in order to avoid loss. The researcher engaged the service of two research assistants. Duration of the field work lasted for two weeks.

**3.6 Data Analysis**

Frequency count, simple percentage will form part of the analysis. Moreover, all the stated hypotheses will be tested using inferential statistics of Analysis of Variance (One-Way ANOVA) with the aid of Statistical Package for Social Sciences (SPSS 20.0) in order to measure the relationship between the dependent and independent variables in the stated hypotheses.

**3.8 Ethical Considerations**

**Confidentiality:** The participants were guaranteed that the identifying information will not be made available to anyone who is not involved in the study and it will remain confidential for the purposes it is intended for.

**Permission:** The researcher sought permission to carry out the research from the commercial drivers union.

**Informed consent**: The prospective research participants were fully informed about the procedures involved in the research and were asked to give their consent to participate.

**Anonymity:** The participant remained anonymous throughout the study and even to the researchers themselves to guarantee privacy.

**3.9 Summary**

This chapter describes the methods and procedure that was adopted in the study. The chapter covers the research design, population, sample and sampling technique, instrumentation, validity and reliability of the instrument, procedure for data collection and data analysis as well as ethical considerations.

**CHAPTER FOUR**

**4.0 RESULT**

This chapter encompasses the presentation, analysis of data collected and interpretation of results. The result of the data is presented by hypothesis, table and results using appropriate statistical analysis for each of the hypothesis. 500 copies of questionnaire were administered to the respondents, while 487 copies were properly filled and returned back to the researcher.

**4.1 TESTING OF HYPOTHESES**

**Hypothesis One**

Hypothesis one which stated that there would be significant relationship between drug use and commercial drivers’ safety in Lagos State was tested using paired sample t-test.

**Table 1: Summary of t-test showing the relationship between**

**drug use and commercial drivers’ safety in Lagos State**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Variable | X | SD | Df | t | P |
| Drug use &  Commercial drivers’ safety | 1.93429 | 1.39510 | 486 | 30.597 | <0.05 |

t=30.597(df=486,P<0.05).

The result in table 1 shows that the value of the t=30.597(df=486:P<0.05) was significant at 5%. The hypothesis which postulated that there would be significant relationship between drug use and commercial drivers’ safety in Lagos State was accepted. Based on this, it was concluded that drug use is has a significant influence on commercial drivers’ safety in Lagos State.

**Hypothesis Two**

Hypothesis two which stated that there would be relationship between drunkenness and commercial drivers’ recklessness was tested using paired sample t-test.

**Table 2: Summary of t-test showing the relationship between**

**drunkenness and commercial drivers’ recklessness**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Variable | X | SD | Df | t | P |
| Drunkenness &  Commercial drivers’ recklessness | 1.98357 | 1.36977 | 486 | 31.957 | <0.05 |

t=31.957(df=486,P<0.05).

The result in table 2 shows that the value of the t=31.957(df=486:P<0.05) is significant at 5%. The hypothesis which claimed that that there would be relationship between drunkenness and commercial drivers’ recklessness was accepted. Hence, it was concluded that drunkenness has a significant influence on commercial drivers’ recklessness.

**Hypothesis Three**

Hypothesis three which stated thatthere would be significant relationship between over-speeding and road traffic accidents was tested using Pearson correlations.

**Table 3: Summary of Pearson Correlations showing the relationship**

**between over-speeding and road traffic accidents.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Variable | X | SD | N | R | P |
| Over-speeding | 3.4908 | 1.02611 | 487 | 0.749 | <0.05 |
| Accidents | 1.4476 | .79662 |

R= .749(P<0.05)

The result in table 3 shows a strong positive correlation between the independent variable (over-speeding) and dependent variable (accidents) with R=.749(P<0.05). The hypothesis which postulated that thatthere would be significant relationship between over-speeding and road traffic accidents was accepted. Based on this, it was concluded that that over-speeding has a significant influence on road traffic accidents.

**Hypothesis Four**

Hypothesis four which stated thatthe use of seat-belt has no influence on commercial drivers’ safety in Lagos State was tested using Pearson correlations.

**Table 4: Summary of Pearson Correlations showing the relationship**

**between gender and academic performance.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Variable | X | SD | N | R | P |
| Seat-belt | 1.3676 | .71895 | 487 | 0.583 | <0.05 |
| Safety | 1.8645 | .87848 |

R= .583(P<0.05)

The result in table 4 shows a strong positive correlation between the independent variable (seat belt) and the dependent variable (safety) with R=.583(P<0.05). The hypothesis which postulated that thatthe use of seat-belt has a significant influence on commercial drivers’ safety in Lagos State was accepted. Consequently, it was concluded that the use of seat-belt is a determinant of commercial drivers’ safety in Lagos State.

**CHAPTER FIVE**

**5.0 DISCUSSION, CONCLUSION AND RECOMMENDATIONS**

**5.1 DISCUSSION**

This chapter consists of the discussion on the result and findings in previous chapter. Moreover, conclusion will be given in this chapter to establish a greater study in further research or investigation and lastly recommendations on how to reduce commercial drivers’ recklessness in Lagos State will be put forward.

The study painstakingly investigated the psychosocial factors predicting commercial drivers’ recklessness in Lagos State. Upon the administration of the research instrument and collection of data that was analyzed the following result was achieved:

Result from the first hypothesis revealed that there is a significant relationship between drug use and commercial drivers’ safety in Lagos State. This result is consistent with the findings of Atubi (2010), who carried out an empirical study on the patterns of Road Traffic Accidents in Lagos state using data for 32 years (1970-2001). His study revealed that more than 90% of road traffic accidents in Lagos State were attributed to recklessness on the part of drivers, with drug use or in-take being a prominent contributor.

The second hypothesis which stated that there is a significant relationship between drunkenness and commercial drivers’ recklessness was supported by this result. This implies that drunkenness has a significant statistical influence on commercial drivers’ recklessness. This result is in consonance with the findings of Al-Ghamdi (2002) that drunkenness is significantly related to commercial drivers’ recklessness. Moreover, it is on this strength that asserted that drug abuse and alcohol has become such a problem of great concern to all well meaning Nigerian and particularly the Federal Government to the extent that the Nigerian National Drug Law Enforcement Agency (NDLEA) was established to combat the social vice with a view to reducing the spread of drug abuse to the barest minimum.

The third hypothesis which stated thatthere is a significant relationship between over-speeding and road traffic accidents was found to be statistically significant. This result dovetails with the findings by Kwaga (2006) found in his study on socio-Economic effects of road traffic accidents in Nigeria that Road Traffic Accidents have become a major concern world over to the extent that lives are wasted daily. He confirms that causes of Road Traffic Accidents have been traced to human, environment and vehicular factors. It was on the fence of this result that Chapman, Roberts & Underwood (2000) argued that those who drive commercial vehicles for a living are more likely to be involved in a vehicular accident than private motorists, even when mileage is taken into account.

Finally, the fourth hypothesis which stated that use of seat-belt has influence on commercial drivers’ safety in Lagos State was supported by this result. The result means that use of seat-belt has a significant positive influence on commercial drivers’ safety in Lagos State. This result is in consonance with the findings of Redelmeier and Tibshirani (2007) shows that helmets and safety belts are effective in reducing fatalities and injuries.

**5.2** **Conclusions**

Ability to drive successfully from point of origin to destination is an important component of road safety. However, in most part of the world especially in developing countries, substantial number of drivers does not get to their destinations successfully. This occurs as a result of drivers’ recklessness along the way. Most crashes are could have been prevented by small differences in driver behaviour but saved for drivers’ recklessness (Redelmeier et al, 2003). This research study explored the psychosocial factors predicting commercial drivers’ recklessness in Lagos State. From the outcome of the study the following inferences could be drawn:

* drug use is a significant predictor of commercial drivers’ safety in Lagos State
* drunkenness has a significant influence on commercial drivers’ recklessness
* over-speeding has a significant influence on road traffic accidents
* seat-belt is a determinant of commercial drivers’ safety in Lagos State.

The study is segmented into five chapters. The chapter one contains the general introduction, research problem; purpose of study, scope of study, significance, e.t.c. Chapter two concentrates on review of relevant theories and empirical literature both from studies done outside and within Nigeria. Chapter three was focused on the research methodology, which embodied the design, setting, population, sample and sampling technique, psychometric properties, procedure and statistical analysis. Chapter four was focused on the analysis of the hypotheses while chapter five presented the discussion of the results of the findings, conclusion drawn and recommendations put forward.

**5.3 Recommendation and Implication of Study**

In line with the findings and conclusion reached, the following policy recommendations were propounded:

The result of my findings has shown that drug use is impacting negatively on commercial drivers’ safety in Lagos State. Thus, the drivers’ tendency of using drugs while driving should be stopped and face misdemeanor fines ranging from N50,000 to N100,000.

The Lagos State government through the commissioner for transportation should organization seminar and workshops for all commercial drivers with the intent of refreshing commercial drivers’ knowledge about the rudiment of safe driving so that the inevitable bad habits of reckless driving acquired can be reduced at a relatively early stage.

Moreover, the result of this research revealed that over-speeding has a significant influence on road traffic accidents. Commercial divers should always obey the advocated speed limits and preventive techniques instituted by the Federal Road Safety Corps (FRSC) against car accident. The implication is that over speeding if not checked will continue to cause mayhem on our roads.

All drivers should attend regular mandatory driver education and training courses, annual driver examination to upgrade their driving skills and also to be continuously made aware of the importance of using seat-belt while driving in Lagos State. Since the result of this study indicated that seat-belt is a determinant of commercial drivers’ safety in Lagos State.

Given that alcohol and drunkenness have been implicated in reckless driving, there should be a concerted effort by the Lagos State Traffic Maintenance Authority (LASTMA), Federal Road Safety Corps (FRSC) and other concerned bodies and agencies to dissuade commercial drivers from drinking.

* 1. **Limitation of the Study**

This work is limited to the study of commercial drivers in Ojo Local Government of Lagos state. The work evaluated factors that influenced their behavior on the road and subsequent implication of such behavior in other road users and the society. However with more time, resources the work could be extended to other Local Government of the state.

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**QUESTIONNAIRE**

Dear Respondent,

This questionnaire was designed to tap information on some aspects of work.

All information given will be treated with high level of confidentiality. Kindly respond by filling on to the various portions as they apply to you.

Your sincere responses will be appreciated.

Thank you.

**…………………..**

Temia Ruth (400 Level) student

**SECTION A: BIO DATA**

**INSTRUCTION:** Please indicate appropriate information with (**√**)

2. **Marital Status:** Single ( ) Divorced ( ) Separated ( ) Widow/Widower ( )

3. **Age of Respondent:** Below 30 years ( ) 30-39 ( ) 40 – 49 ( ) 50 and above ( )

4. **Educational qualification:** Primary ( ) Secondary ( ) Others (specify) **…………..**

5. **Driving Experience:** Below 5years ( ) 6-10years ( ) 10years and above ( )

**SECTION B**

**INSTRUCTION:** Please respond to the following statement as they apply to you. Please tick (**√**) using the following format:

Note: **(N)** = Never **(ST)** = Sometimes

**(OF)** = Often **(NA)** = Nearly Always

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S/N** | **QUESTIONS** | **N** | **ST** | **OF** | **NA** |
| 1. | It is dangerous not to use seat belt |  |  |  |  |
| 2. | Seat belt gives me tummy problems |  |  |  |  |
| 3. | Seat belt is good for protection against accidents |  |  |  |  |
| 4. | Seat belt is not part of my culture |  |  |  |  |
| 5. | I bribe road safety for not using seat belt |  |  |  |  |
| 6. | No penalty for using seat belts |  |  |  |  |
| 7. | Using of seat belt is not compulsory |  |  |  |  |
| 8. | I like driving with my seat belt |  |  |  |  |
| 9. | Seat belt guides against injury |  |  |  |  |
| 10. | I always drive without wearing seat-belt |  |  |  |  |

**SECTION C**

**INSTRUCTION:** Please respond to the following statement as they apply to you. Please tick (**√**) using the following format:

Note: **(N)** = Never **(ST)** = Sometimes

**(OF)** = Often **(NA)** = Nearly Always

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S/N** | **QUESTIONS** | **N** | **ST** | **OF** | **NA** |
| 11. | It is okay to take alcohol anytime you feel like |  |  |  |  |
| 12. | I like the feelings associated with alcohol intake |  |  |  |  |
| 13. | On needs to take alcohol for health reasons |  |  |  |  |
| 14. | I like to take alcohol before driving out every morning |  |  |  |  |
| 15. | I don’t mind taking alcohol even if am going to drive |  |  |  |  |
| 16. | Sometimes i end up in hospital as a result of taking alcohol before driving |  |  |  |  |
| 17. | I feel am becoming an irresponsible driver because of alcohol intake |  |  |  |  |
| 18. | As a driver I drink for the effect of alcohol without caring for the passengers wellbeing |  |  |  |  |

**SECTION D**

**INSTRUCTION:** Please respond to the following statement as they apply to you. Please tick (**√**) using the following format:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S/N** | **QUESTIONS** | **N** | **ST** | **OF** | **NA** |
| 19. | I always over speed when driving |  |  |  |  |
| 20. | I can over-take without ensuring that no vehicle is coming |  |  |  |  |
| 21. | I like to over speed in order to avoid road safety officials |  |  |  |  |
| 22. | Over speeding kills |  |  |  |  |
| 23. | I like to over speed because I don’t have complete drivers license |  |  |  |  |
| 24. | Sometimes I lose break control due to over speeding |  |  |  |  |
| 25. | I enjoy over speeding |  |  |  |  |

**SECTION E**

**INSTRUCTION:** Please respond to the following statement as they apply to you. Please tick (**√**) using the following format:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S/N** | **QUESTIONS** | **N** | **ST** | **OF** | **NA** |
| 26. | Drugs intake sometimes make sleep on steering |  |  |  |  |
| 27. | Sometimes i try to control drinking by giving it up for days or weeks at a time |  |  |  |  |
| 28. | Severally I have been withheld of my drivers’ license because of drinking |  |  |  |  |
| 29. | I hit the road without checking the condition of my vehicle due to my drunken behaviour |  |  |  |  |
| 30. | Drinking habits makes me drive against traffic rules and regulations |  |  |  |  |

**APPENDIX**

**Hypothesis One**

**Paired Samples Statistics**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | | Mean | N | Std. Deviation | Std. Error Mean |
| Pair 1 | Drug Use | 3.4415 | 487 | 1.06001 | .04803 |
|  | Safety | 1.5072 | 487 | .84098 | .03811 |

**Paired Samples Test**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Paired Differences | | | | | t | df | Sig. |
| Mean | Std Dev | Std. Error Mean | 95% Confidence Interval of the Difference | |
| Lower | Upper |
| Drug use &  Commercial drivers’ safety | 1.93429 | 1.39510 | .06322 | 1.81008 | 2.05851 | 30.597 | 486 | .000 |

**Hypothesis Two**

**Paired Samples Statistics**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | | Mean | N | Std. Deviation | Std. Error Mean |
| Pair 1 | Drunkenness | 3.4908 | 487 | 1.02611 | .04650 |
|  | Recklessness | 1.5072 | 487 | .84098 | .03811 |

**Paired Samples Test**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Paired Differences | | | | | t | df | Sig. |
| Mean | Std Dev | Std. Error Mean | 95% Confidence Interval of the Difference | |
| Lower | Upper |
| Drunkenness &  Commercial drivers’ recklessness | 1.98357 | 1.36977 | .06207 | 1.86161 | 2.10553 | 31.957 | 486 | .000 |

**Hypothesis Three**

**Descriptive Statistics**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Mean | Std. Deviation | N |
| Over-speeding | 3.4908 | 1.02611 | 487 |
| Accidents | 1.4476 | .79662 | 487 |

**Pearson Correlations**

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | Over-speeding | Accidents |
| Over-speeding | Pearson Correlation | 1 | .749(\*\*) |
| Sig. (2-tailed) |  | .000 |
| N | 487 | 487 |
|  |  |  |
| Accidents | Pearson Correlation | .749(\*\*) | 1 |
|  | Sig. (2-tailed) | .000 |  |
|  | N | 487 | 487 |

\*\* Correlation is significant at the 0.05 level (2-tailed).

**Hypothesis Four**

**Descriptive Statistics**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Mean | Std. Deviation | N |
| Seat-belt | 1.3676 | .71895 | 487 |
| Safety | 1.8645 | .87848 | 487 |

**Pearson Correlations**

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | Seat-belt | Safety |
| Seat-belt | Pearson Correlation | 1 | .583(\*) |
| Sig. (2-tailed) |  | .000 |
| N | 487 | 487 |
|  |  |  |
| Safety | Pearson Correlation | .583(\*) | 1 |
|  | Sig. (2-tailed) | .000 |  |
|  | N | 487 | 487 |

\* Correlation is significant at the 0.05 level (2-tailed).

**ABSTRACT**

The study was designed to examine the psychosocial factors influencing commercial drivers’ recklessness in Lagos State. The independent variables were the psychosocial factors - drug use, drunkenness, over-speeding and use of seat-belt, while drivers’ recklessness served as the dependent variable. Age, educational qualifications and driving experience were included as control variables because of their potential influence on the dependent variable.

Five hundred (500) participants were randomly selected using simple random sampling technique on commercial drivers in Ojo Local Government Area in Lagos State.

The result showed that; drug use significantly predicted commercial drivers’ safety in Lagos State, t=30.597(df=486:P<0.05), level of drunkenness has a significant influence on commercial drivers’ recklessness t=31.957(df=486:P<0.05), over-speeding significantly influenced road traffic accidents (R=.749,P<0.05), and the use of seat-belt was a determinant of commercial drivers’ safety in Lagos State R=.583(P<0.05). The study recommended that the Lagos State government through the commissioner for transportation should organise seminars and workshops for commercial drivers with the intent of refreshing their knowledge about the rudiments. This should inevitably curb and reduce reckless driving significantly.

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